

BEFORE THE
ILLINOIS COMMERCE COMMISSION

Kevin Grens	:	
v.	:	
Illinois-American Water Company	:	
	:	
People of the State of Illinois	:	Docket No. 05-0681
v.	:	Docket No. 06-0094
Illinois-American Water Company	:	Docket No. 06-0095
	:	(Cons.)
	:	
Village of Homer Glen	:	
v.	:	
Illinois-American Water Company	:	

Rebuttal Testimony of
Scott J. Rubin

on Behalf of

the People of the State of Illinois
and
the Village of Homer Glen

September 8, 2006

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1. Introduction

Q. Please state your name.

A. My name is Scott J. Rubin.

Q. Have you previously filed testimony in this case?

A. Yes, my direct testimony and exhibits were filed on June 30, 2006, as AG/HG Exhibits 1.0 through 1.17.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony will respond to the testimony filed by Illinois-American Water Company (IAWC or Company) witnesses Ruckman (IAWC Exh. 1.0) and Zerbe (IAWC Exh. 3.0). In addition, I will discuss the testimony filed by the Staff of the Illinois Commerce Commission (ICC), through witnesses Johnson (ICC Staff Exh. 1.0) and Howard (ICC Staff Exh. 2.0).

2. Summary of Rebuttal

Q. Does your review of the testimony filed by Company or Staff witnesses change any of the findings, recommendations, and conclusions in your direct testimony?

A. No. Neither the Company nor Staff witnesses provide any information that changes my initial findings, conclusions, or recommendations.

Q. Before you discuss the details of the other parties' testimony, please give your overall impression of the Company's case.

A. Briefly, I am disappointed with the Company's testimony. There is no question that IAWC has experienced serious problems with its metering, meter reading, billing, and

customer service. These problems have been in existence for several years and it appears that the Company is just now starting to treat the problems as serious ones. Initially, the Company denied that there was a problem at all. Then after the Village of Homer Glen became involved and hundreds of its residents complained, the Company started to pay some attention, but still did not understand the scope or true causes of the problem. As we conducted discovery in this case, the Company stepped up its efforts and started to understand the nature of the problem in the Chicago Metro area. But the Company appears to have stopped there and continues to deny that it has a more serious and more widespread problem.

Q. What is the “widespread problem” you are referring to?

A. I am referring to the Company’s laxness regarding metering, meter reading, billing, estimated bills, zero-consumption bills, and non-revenue water (that is water that never registers on customers’ meters). These are interrelated problems that appear to be widespread in Illinois and through the United States where IAWC’s sister companies provide water service. I will discuss the information supporting my view that these problems are widespread later in the testimony. As an initial matter, though, I do not find that the Company has provided any data or conducted any analyses to demonstrate that my initial findings, conclusions, and recommendations are unwarranted. Instead, we have statements that effectively ask the intervenors to “trust us, there’s no problem.” Given the history of this case and the numerous problems we have encountered, I do not believe the Company has shown that it should be trusted when it makes exculpatory statements. In my opinion, there must be an independent audit of the Company’s

metering, meter reading, and billing operation to determine the full extent of the problem and to ensure an effective remedy.

3. Rebuttal to Mr. Ruckman

Q. Have you reviewed Mr. Ruckman's testimony (IAWC Exh. 1.0)?

A. Yes, I have.

Q. Mr. Ruckman states that many of the issues you raised stem from Homer Glen in the summer of 2005. Is that accurate?

A. No, it is not accurate. In my direct testimony, I found evidence that the back-billing problem in the Chicago Metro area went back to at least 2003 and appears to have continued into 2006. The Company is trying to limit the issue to back-billing associated with the replacement of odometer-style meter-reading devices, but the problems I found appear to be more pervasive than that. The Company does not appear to be adequately tracking and investigating repeat estimated bills or repeat zero-consumption bills. As a result, when it finally realizes that there is a metering or meter-reading problem, very large back balances can build up.

As I explained in my direct testimony, I found several instances where the Company had repeatedly estimated bills for six months or more, and other instances where it had zero-consumption reads for more than a year before it investigated. Further, it is clear that the Company did not have procedures in place to limit any back billing to 12 months (residential) or 24 months (commercial) as required by Illinois law. The replacement of meters in the Chicago Metro area has exposed these problems, but it does

not reflect the full scope of the problems. IAWC's billing, metering, estimating, and follow-up procedures are the same statewide.

Q. On lines 81-92 of his testimony, Mr. Ruckman discusses changes IAWC is planning in its bill format. Do these changes address your concerns?

A. I cannot answer that for certain because Mr. Ruckman states that the new bill format is not available yet. From his testimony, though, it sounds like the Company is aware of and should be addressing the major problems I found with the information contained on its bill: (1) the failure to show the volumetric rate for the purchased water charge and (2) the failure to indicate when a bill included consumption associated with a prior billing period. While I am pleased that the Company appears to be addressing these problems with its billing format, that does not excuse the Company's failure to comply with Illinois's billing requirements for the past several years.

Q. Mr. Ruckman discusses the meter replacement program in the Chicago Metro area. Is his description of the program consistent with his testimony that the Company has recognized the seriousness of the problem and is accelerating meter replacements?

A. No, it is not. Mr. Ruckman states that IAWC recognized that the Chicago Metro area meters were outdated after it acquired the service area from Citizens Utilities in early 2002, and that Citizens had not properly tested and replaced water meters in the service area. He states that IAWC's replacement program started in 2003, but that it will not be finished until 2010. In other words, it will take IAWC 8 years to completely change the meters that were in place when it acquired the service area from Citizens.

This is only slightly faster than the testing schedule required by the Commission's regulations. Section 600.340 of the regulations requires water meter testing schedules ranging from four years (1.5-inch and larger meters) to 10 years (5/8-inch meters). According to IAWC, Citizens had not complied with these regulations, presumably meaning that some meters had been in service and not tested for longer than 10 years when IAWC acquired the system in 2002. By waiting until 2010 to complete the meter replacements, IAWC will effectively be leaving some meters in place and untested for perhaps 20 years or even longer. This is not reflective of an aggressive, high-priority replacement program by the Company. On the contrary, IAWC seems willing to let its noncompliance with the meter testing regulations persist for nearly a decade after it acquired a non-compliant service area.

Q. Mr. Ruckman discussed unaccounted-for water, non-revenue water, and unaccounted for flow in his testimony (lines 410-488). Do you have a response to this portion of his testimony?

A. I address these issues in detail in IAWC's on-going purchased water adjustment case (Docket No 06-0196) and I believe that is the appropriate docket in which to make an adjustment to IAWC's rates for non-revenue water.

Q. Without going into detail, can you explain the different terms that Mr. Ruckman uses?

A. Yes. Non-revenue water is the difference between water that enters the distribution system (from company sources or wholesale purchases) and water that passes through customers' meters. As the term implies, this is water that the utility produces or purchases, but that does not generate revenue.

Unaccounted-for water is a subset of non-revenue water. Some of the water that does not produce revenue has known uses. For example, when a utility flushes mains or backwashes filters at a treatment plant, it should know how much water it has used (either through metering or by estimating the flow rate and length of time). Similarly, when a fire department uses water from a fire hydrant, it is supposed to fill out a report that estimates the amount of water used. These are “accounted for” uses of non-revenue water and are deducted from total non-revenue water to derive unaccounted-for water.

Finally, unaccounted-for flow is a term that is specifically defined in the regulations of the Illinois Department of Natural Resources. This refers to unaccounted-for water after an allowance for leakage, given the age of the distribution system. To the best of my knowledge, this measure is not widely used in the water industry.

Q. Which of these concepts are relevant for this Commission?

A. Non-revenue water is the most relevant concept for this Commission. It measures the difference between water produced and water sold. The difference has to be paid for by somebody. Some of that cost is recovered through fire protection charges, but utilities will attempt to pass most of it along to customers by increasing the charge for water consumption.

Unaccounted-for water also is used by some regulatory commissions as a way to measure a utility’s performance. Great caution is required when using this measure, however, because it requires an understanding of how the utility “accounts for” some of its non-revenue water. I have heard of instances where utilities estimate the amount of

water lost through each leak it fixes, thereby inappropriately “accounting” for some of the lost water and improperly reducing the amount of unaccounted-for water.

Unaccounted-for flows is a measure that is useful for determining an Illinois utility’s compliance with Department of Natural Resources regulations, but I do not consider it relevant for economic regulatory purposes.

Q. Do you refer to unaccounted-for flows in any testimony you filed before this Commission?

A. Yes, I refer to it in my testimony in the purchased water case, but only to indicate that IAWC appeared to be out of compliance with the Department of Natural Resources’ requirements.

Q. On lines 484-488, Mr. Ruckman states that non-revenue water is not a system-wide concern for IAWC. Do you agree?

A. No, I do not agree, and frankly I am stunned that Mr. Ruckman thinks the Homer Glen area is the only portion of IAWC with a serious non-revenue water problem. From the Company’s annual report to the Commission for the year ending December 31, 2005, I have compiled the non-revenue water data in each of its service areas, as shown on AG/HG Exhibit 2.1. These data show that during 2005, IAWC had non-revenue water of 17.2%, ranging from 11.2% in its Pekin and Pontiac Districts to 38.5% in its Cairo District. System-wide IAWC had to purchase or produce 47,949,368 thousand gallons of water in order to sell 39,700,840 thousand gallons. In other words, it had to purchase or produce 121 gallons for each 100 gallons that it sold. This is a tremendous amount of waste and, in my opinion, it absolutely should be a statewide concern for IAWC.

Q. Do you agree with Mr. Ruckman that non-revenue water of as much as 20% is reasonable for a well-run water utility?

A. No, I do not. The source cited by Mr. Ruckman does not say that 20% non-revenue water is appropriate or reasonable; it only says that some older water systems have non-revenue water as high as 20%. In fact, other publications of the American Water Works Association (AWWA) indicate that a much lower level of non-revenue water is appropriate. For example, in 1996, AWWA's Leak Detection and Water Accountability Committee stated: "AWWA has never adopted a policy or issued guidelines to the effect that 15 percent unaccounted-for water is acceptable." After determining the then-current state of technology and management practices in the water industry, the committee concluded: "the necessary technologies, expertise, and methodologies are available to identify and substantially reduce unaccounted-for water to a more acceptable and realistic level. As the twenty-first century approaches, the goal for unaccounted-for water should be less than 10 percent." Committee report: Water accountability, *Journal American Water Works Association*, July 1996, pp. 108-111.

Q. On lines 498-511, Mr. Ruckman tries to dismiss your analysis by focusing on AG/HG Exhibit 1.5, Homer Glen Area Customers Receiving Bills More Than Three Times Previous Bill. Do you agree with him?

A. No, I do not. Mr. Ruckman errs when he attempts to minimize the magnitude of IAWC's problem. First, Mr. Ruckman states that there are 39 unique customers shown on my exhibit (there are actually 41 unique customer accounts on the exhibit) and that they "represent only 0.015% of all bills issued in Homer Glen" between 2003 and 2005. This figure is seriously misleading. The accounts I used were not drawn from data for all

Homer Glen area customers because I have not seen data for all Homer Glen area customers. Rather, these accounts were identified from the 474 accounts the Company identified as possibly receiving back bills because of a meter replacement. (Actually there were fewer than 474 accounts in the Company's list because of duplicate records.) Thus, the 41 accounts I identify represents more than 8 percent of the customer accounts identified by the Company.

Further, I did not identify these customers as the full extent of the Company's billing problems. They were identified to show the magnitude of some of the serious billing problems that occurred.

Q. Mr. Ruckman claims that some of these bills might represent customers returning from a vacation. Do you agree?

A. Mr. Ruckman does not provide any information to indicate which of these bills might represent someone returning from vacation, but I find it very hard to believe that most of these bills would be anything close to normal. Specifically, 30 of the 41 accounts were billed for consumption of 30,000 gallons or more in one month. Consumption at that level would be extremely unusual in IAWC's service area. According to IAWC's bill frequency analysis for Chicago-Lake customers from its last rate case, only 551 of 208,183 bills – approximately 0.26% of bills – to 5/8-inch meter residential customers contained consumption of more than 4,000 cubic feet (approximately 29,900 gallons). It would be highly unlikely, therefore, for these bills in excess of 30,000 in one month to be the result of a customer returning from vacation.

Q. Do you have data to determine how “normal” it would be for a customer to receive a bill that is three times higher than his or her previous month’s bill?

A. No, I do not. We requested information about customers in Illinois who received bills at least 50% higher than the previous month’s bill in data request AG 2.7, but IAWC did not provide this information. That request also asked for customers whose bills were at least 50% higher than the same month in the previous year. IAWC provided data only for year-on-year changes; it did not provide information about customers whose bills went up by at least 50% in one month. It appears that the Company relied on precisely this type of information in its testimony, even though it failed to provide the same information to me during discovery.

Q. On lines 538-571, Mr. Ruckman states that the data quality errors you identified are from information that was compiled manually and do not represent problems with the billing system itself. He also claims that some of your requests for data were unreasonable. How do you respond?

A. First, I do not consider any of my information requests to be unreasonable. The information I requested was necessary to investigate the sources of the problems identified by IAWC’s customers. Indeed, as I discuss elsewhere, the Company’s testimony relies on some of the same information that the Company claimed it was too burdensome to provide to me. If the Company could not construct a query to extract exactly what I asked for, someone could have contacted us to see if the request could be modified. Instead, the Company just ignored the request or refused to provide any information in machine-readable form, which I consider to be a failure to respond in good faith.

The specific example that Mr. Ruckman gives on lines 548-556 is instructive. In response to AG 3.19, the Company provided a print-out that was more than 270 pages long. The Company obviously knew how to extract the information on the print-out from its billing system. Yet in response to AG 3.20, it refused to provide a machine-readable version of this same data. If the Company could not provide the additional information requested in AG 3.20, it should have contacted us. I would have been happy to work with the Company to determine the data that could reasonably be produced from its billing system. At a minimum, though, the Company should have provided a machine-readable version of the data contained in the 270-page print-out it provided.

Second, and more importantly, I do not understand why the Company's billing system could not have been used to generate the data that the Company compiled manually. The billing system contains each customer's meter number (and that number appears on each bill). The billing system should be able to generate data based on customers whose meter number changed. Indeed, the comparison of meter numbers was part of the analysis I conducted of the Company's data on large changes in bills from one year to the next, as I discuss on lines 366-386 of my direct testimony.

Q. On lines 610-639, Mr. Ruckman criticizes your conclusion that there may have been as many as 7,900 make-up bills issued in the first five months of 2006. How do you respond?

A. This is another instance where the Company has not provided me with the data that are necessary to respond. On May 4, the Company was sent our second data request. Question 2.7 asked for information on customers whose bills were at least 50% higher than the previous month, or than in the same month of the previous year. On June 28 –

two days before my direct testimony was due – we received a partial response to the data request. The data we received contained information only for the same month of the previous year; it did not contain information responsive to the request for differences from the prior month. Further, the response did not include very important information we requested: the customer’s consumption in each of the 12 months before and after the month in which the 50% increase was billed. Indeed, the Company refused to provide this important billing history, stating it was “unreasonable and unduly burdensome on the grounds that providing such data would require generating over 11,000,000 additional records.”

My testimony was based on the data the Company was willing to provide. That is why I was very clear in my direct testimony that I did not know if all of the bills I identified were back bills (lines 376-378).

But now Mr. Ruckman is criticizing me because I did not have access to the billing history for these accounts. His conclusion (lines 620-621) that “the majority of these accounts involved normal usage for the customer” can be reached only by analyzing the billing history – the very billing history that I requested and that the Company refused to provide. Further, I would note that Mr. Ruckman does not provide a basis for reaching any conclusions about “the majority” of these accounts when he says he analyzed only 400 of the 7,900 accounts I identified.

Q. Based on Mr. Ruckman's criticisms, did you conduct any further analysis of the 7,900 accounts you initially identified?

A. Yes, I did, but of course I still do not have access to the billing history for these accounts. To eliminate the types of problems Mr. Ruckman identified (such as a home being vacant for a portion of the month in the previous year, and thus having very low consumption; or a minor change in consumption that could result in a large percentage increase, such as consumption going from 5,000 to 8,000 gallons in a month), I selected a subset of the 7,909 accounts I initially identified. I selected only those accounts that had consumption in a normal residential range in the relevant month in 2005; that is, consumption between 5,000 and 20,000 gallons. From those, I selected only the accounts that had consumption increase by at least 10,000 gallons and by at least 100%. Using these fairly stringent criteria, I still identified 480 accounts that had substantial increases in bills that look more like back-billing than normal fluctuations in consumption. Further, I would emphasize that I selected these accounts initially because they had a meter change between 2005 and 2006 and they had one and only one month in 2006 that was at least 50% higher than the same month in 2005.

Simply, from these data it appears that the Company is continuing to issue make-up bills to customers who have had a meter change. And some of those bills are substantial – for example, consumption of 12,000 in the historic month, increasing to consumption of 69,000 gallons in the same month of 2006 (account 8962) or consumption of 9,000 increasing to 54,000 gallons in the same month of 2006 (account 921). There are dozens of customer accounts with similar types of increases. To give some more examples, I prepared AG/HG Exhibit 2.2. This exhibit is a list of the 50

285 accounts I selected using these criteria with the highest percentage increases from 2005 to
286 the same month in 2006.

287 **Q. Other than working with this admittedly incomplete data, do you have other**
288 **indications that back-billing is a widespread problem for IAWC, contrary to Mr.**
289 **Ruckman’s testimony?**

290 A. Yes, after my findings were publicized, the Office of Attorney General received
291 correspondence from two customers in other parts of Illinois complaining of billing and
292 metering problems that look very similar to the problems we found in the Homer Glen
293 area. Copies of these letters are attached as AG/HG Exhibit 2.3.

294 **Q. Mr. Ruckman describes the process for offering payment agreements and sending**
295 **letters to affected customers (lines 696-709). Is his description consistent with what**
296 **you found in your investigation?**

297 A. No, it is not. As I discussed in my direct testimony, out of the 474 accounts identified by
298 the Company as receiving back bills in the Chicago Metro area, the Company entered
299 into only 15 payment agreements. The fact that other Chicago Metro customers have
300 payment agreements, for whatever reason, is irrelevant to this case. The Company
301 already acknowledged that payment arrangements for back billing are not “deferred
302 payment arrangements” under the Commission’s regulations (response to Staff CSD-IA
303 1.04(c)). Yet, now Mr. Ruckman is attempting to confuse this issue by talking about
304 deferred payment agreements as if they are the same as payment arrangements for back
305 billing.

Moreover, the letters described by Mr. Ruckman to “alert[] customers to higher than normal usage” were, in fact, part of the problem here. Customers with back bills received letters that did not refer to back billing at all. Instead, the letters made it sound like their high bills were somehow the customer’s fault – they had a leak or were watering their lawns too much. For example, I have attached as AG/HG Exhibit 2.4 a letter sent by IAWC to several Homer Glen area customers in December 2005 (I have removed customer-identifying information). The letter does not even mention meter replacements and make-up billing.

Q. On lines 776-781, Mr. Ruckman discusses an appropriate benchmark for the percentage of utility bills that should be estimated. What is your response?

A. Mr. Ruckman suggests that my use of a study by the Ascent Group is not appropriate for water utilities and, instead, a study published by the American Water Works Association Research Foundation (AwwaRF) should be used. I disagree. The Ascent Group is a consulting group that does a great deal of work in the utility customer service area. That firm performed much of the work on both studies. The AwwaRF project started in 2003. The study I referred to includes data from 2001 through 2004. For all intents and purposes, it appears that these studies used the same methodology and examined much of the same data. The difference is that the study published under the Ascent Group’s name includes more utilities in general and more water utilities in particular. The study I cited includes data for 76 utilities, of which 23 are water utilities. The AwwaRF study uses data from 56 utilities, of which only 15 are water utilities. Attached as AG/HG Exhibit 2.5 is the summary table from the study I cited, which is similar in format to the summary table in the AwwaRF study that Mr. Ruckman attached as IAWC Exhibit 1.08.

Since the two studies were largely conducted by the same firm, using essentially the same methodology, and covering a similar time period, I consider it more appropriate to use the results of the study with the larger number of participating utilities. That would be the study I cited, with 50% more water utility participants, that shows the average water utility estimates fewer than 2% of its bills.

Q. Beginning on line 845, Mr. Ruckman discusses IAWC's procedures and practices for customer accounts that receive consecutive bills with zero consumption. What is your response to this portion of his testimony?

A. This portion of Mr. Ruckman's testimony causes me great concern. My direct testimony specifically addressed accounts that received three or more consecutive bills with zero consumption. Mr. Ruckman acknowledges that IAWC has thousands of such accounts. As I said in my direct testimony, I am troubled by IAWC's records showing that many of these accounts have received zero consumption bills for many months – some for more than a year. Mr. Ruckman has not refuted this point and he does not explain why it is reasonable to allow zero-consumption bills to be rendered for many months without an investigation.

Mr. Ruckman attempts to dismiss this issue because of housing vacancies. Then he states "it would not be prudent that every zero-consumption bill be fully investigated" (lines 870-871). I did not suggest that it would be prudent to investigate every zero-consumption bill. I testified that three consecutive zero-consumption bills should be investigated. Mr. Ruckman also dismisses this, saying that the Company "can track zero use bills and has procedures in place to investigate them." But the fact that the Company

can “track” them or that it has “procedures in place” does not mean that the Company is following those procedures.

Q. Have you reviewed the Company’s actual, written procedures for dealing with zero-consumption bills?

A. Yes, I have. The Company’s written procedures were provided in response to Homer Glen data request 1.45. I am attaching a copy of the relevant portion of the procedures as a Confidential exhibit AG/HG Exhibit 2.6 (Confidential), because the Company claims that its procedures are confidential. The Company, however, has not objected to placing in the public record the following quotation from its procedures: “A ZERO order is issued when it is determined that the account is billing -0- for 3 consecutive months. The FSR [field service representative] will leave a card for the customer to phone in to schedule a MTRCH [meter change] order, as well as the Billing Department will generate a letter through LGS to notify the customer of the discrepancy so we can obtain an actual read and repair/replace the meter.”

Q. Is IAWC complying with its procedures?

A. No, it is not. As Mr. Ruckman acknowledges, IAWC has thousands of customers who are receiving three or more consecutive zero-consumption bills. The Company is not contacting all of these customers, issuing orders to check the meter, or otherwise ensuring that it obtains an accurate meter reading. The Company’s written procedures are fully consistent with the recommendations in my direct testimony, but IAWC is not following them. The result is that IAWC has thousands of customers receiving three or more consecutive bills with zero consumption, and in many cases this continues for many months after the three-month period specified in the Company’s procedures.

374 **Q. In summary, is there anything in Mr. Ruckman’s testimony that changes the**
375 **findings, recommendations, and conclusions you reached in your direct testimony?**

376 A. No.

377 **4. Rebuttal to Mr. Zerbe**

378 **Q. Have you reviewed Mr. Zerbe’s testimony (IAWC Exh. 3.0)?**

379 A. Yes, I have.

380 **Q. Does Mr. Zerbe’s testimony address IAWC’s billing and metering procedures?**

381 A. No, he does not address these issues. Mr. Zerbe’s testimony is directed to showing that
382 the billing and customer-information software used by IAWC and its sister companies is
383 providing accurate information.

384 **Q. Do you have any reasons to doubt Mr. Zerbe’s testimony?**

385 A. No, I do not. My criticisms of IAWC’s billing system were much broader than software
386 issues. My concerns relate to the quality of data being placed in the system, the way in
387 which what Mr. Zerbe calls “exception reports” are being used (or not used), and how
388 IAWC’s personnel retrieve and otherwise use data from the system.

389 **Q. Can you give an example?**

390 A. Yes, Mr. Zerbe states that the software “generates exception conditions that identify
391 accounts that have zero usage during each billing run” (lines 150-151). He then testifies
392 that this information “can be used by the company to identify accounts that require
393 investigation.” But he does not discuss whether IAWC actually does use this information
394 to appropriately investigate consecutive zero-consumption bills. In other words, Mr.
395 Zerbe testifies that the software provides IAWC’s management with certain information,

but he does not testify as to what management does with that information, or as to how the information gets into the billing system to begin with (for example, the accuracy of meter reading data).

Similarly, on lines 208-211, Mr. Zerbe states that the Company's inability to respond accurately to some of my information requests is not a result of software problems. Rather, it seems that the problems the Company cited in producing data resulted from its personnel's inability to efficiently retrieve available information from the computer or from manual records. Again, I accept Mr. Zerbe's characterization of the software, but that does not change the fact that IAWC is not able to efficiently retrieve information from the software that is needed to monitor and assess its metering and meter reading operations.

Q. On lines 212-229, Mr. Zerbe states he is not aware of similar problems at other American Water Works Company (AWWC) subsidiaries. How do you respond?

A. Mr. Zerbe also does not say what he did to find out if there were similar problems with estimated bills, metering, meter reading, or non-revenue water at other AWWC companies. I have not conducted a comprehensive investigation, but I am generally aware of similar problems at other AWWC companies.

For example, one of the reasons given by the owner of AWWC (RWE AG, a German utility holding company) for wanting to sell AWWC is the high level of non-revenue water at AWWC, amounting to 19% system-wide, with figures as high as 30% in Pennsylvania. Minutes of RWE Supervisory Board meeting of November 4, 2005 (Public Version).

Another example is in New Jersey. Data provided by the AWWC operating utilities in that state, from April 2003 through March 2005, show that their goal is to estimate between 11% and 13% of meter readings each month, while actual performance has ranged between estimating 7% and 14% of meter readings, with no data available for several months.¹ These figures are incredibly high given the utility industry average of estimating fewer than 2% of meter readings on an annual basis, as I discussed in my direct testimony.

One further example is in Arizona, where I understand the Arizona Corporation Commission has been investigating the AWWC utility's metering and billing practices. According to the Request for Proposals issued by the Arizona staff in November 2005, the investigation concerns "usage estimation, meter reading, refunding and billing practices of Arizona-American Water Company."

I disagree, therefore, with Mr. Zerbe's opinion that other AWWC subsidiaries do not have similar types of problems. I believe there are strong indications that the problems I have identified in Illinois are not only statewide, but may be national in scope for AWWC companies.

Q. What do you conclude from Mr. Zerbe's testimony?

A. My concerns are with the totality of the billing, metering, meter reading, and customer service operation of the Company. Mr. Zerbe's testimony indicates that the underlying billing software may not be a problem. I accept his judgment. All that means is that the

¹ New Jersey Board of Public Utilities Docket No. WM06050388, response data request to RAR-S-7(d), provided August 10, 2006.

concerns – the inaccurate bills, the failure to follow procedures, the prevalence of consecutive estimated and zero-consumption bills – have their root cause elsewhere. It may not be a software problem, but there certainly are problems within IAWC’s metering and billing operations.

5. Rebuttal to Mr. Johnson

Q. Have you reviewed Mr. Johnson’s testimony (ICC Staff Exh. 1.0)?

A. Yes, I have.

Q. What is your understanding of the purpose of Mr. Johnson’s testimony?

A. As I read it, Mr. Johnson’s testimony and investigation are focused on IAWC’s compliance with specific, technical requirements of the Commission’s regulations.

Q. Did Mr. Johnson find any violations?

A. Yes, he did. His testimony obviously speaks for itself, but it is fair to say that he found several violations of Commission regulations.

Q. Did Mr. Johnson’s investigation cover the full scope of issues you raised in your direct testimony?

A. No, it does not. Mr. Johnson does not directly address the billing and meter reading issues that are the primary focus of my testimony. Further, even his investigation of meter testing records in the Homer Glen area appeared to focus on the meters that are in place today, rather than on the meters that were in service prior to the installation of new meters within the past year or so. IAWC witness Ruckman acknowledged that IAWC was not in compliance with the Commission’s meter testing requirements in the Chicago Metro area, but the methodology Mr. Johnson used did not identify these violations.

Q. On lines 735-759, Mr. Johnson disagrees with your recommendation that there should be a system-wide investigation of fire hydrant and valve maintenance practices. How do you respond?

A. I respectfully disagree. IAWC has common management throughout Illinois. If concerns are found in one service area (as they have been, and as Mr. Johnson confirms), then it is reasonable to investigate the other service areas to see if there is a similar concern. It could be that the problem is a function of the local personnel, it could be a question of the allocation of resources statewide, or it could be a function of Company policy or senior management directives. The only way to know for certain whether a problem is statewide in scope is to conduct the investigation. Fire protection is such a critically important public safety function that I believe an IAWC-wide investigation is warranted.

Q. Does Mr. Johnson's testimony result in changes in any of your recommendations?

A. No, it does not.

6. Rebuttal to Ms. Howard

Q. Have you reviewed Ms. Howard's testimony (ICC Staff Exh. 2.0)?

A. Yes, I have.

Q. Did Ms. Howard's investigation cover the full scope of issues you raised in your direct testimony?

A. No, it does not. It appears that Ms. Howard focused on IAWC's plans for the future, rather than on the Company's actions that gave rise to the complaints.

Q. Does Ms. Howard directly address the issues that are of primary concern to you?

A. No, she does not.

7. Conclusion

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483 **Q. In summary, has your review of the testimony filed by IAWC and Staff witnesses**
484 **changed your findings, conclusions, and recommendations?**

485 **A. No.**

486 **Q. Does this conclude your rebuttal testimony?**

487 **A. Yes, it does.**